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REMARKS

Reconsideration of the application and entry of the amendment are respectfully requested. Claims 1 to 48 are currently pending, and no claims have been amended.

The Office Action mailed September 12, 2003 reopened prosecution and addressed claims 1 to 48. Claims 1 to 48 were rejected.

Claim 16 was rejected under 35 U.S.C. 102(b) as being anticipated by Newcomb (US 4,695,055). The Examiner stated that Newcomb discloses a golf ball formed from reaction injection molding, and the ball structure includes a homogeneous translucent plastic and a light stick inserted therein to make the golf ball multiple pieces. The Examiner concluded that column 1, lines 55 to 57 teach a polyurethane material for forming the ball.

Applicants respectfully submit that Newcomb does not anticipate Applicants' claim 16, and Applicants respectfully disagree with the Examiner's characterization of Newcomb. Newcomb discloses a translucent plastic golf ball having a hole through the center of the ball to hold a light stick. Contrary to the Examiner's assertions, Newcomb does not disclose a multi-piece golf ball, as defined by Applicants. The term multi-piece, or multi-layer, is known in the art. Applicants, at page 1, lines 22 to 24, define a multi-piece golf ball as a core of one or more layers and a cover of one or more layers (i.e., at least two pieces, a core and a cover). The light stick that is placed in the center of the ball is not considered one of the pieces or layers, as defined by Applicants' specification. Newcomb does not disclose a golf ball having at least a core and a cover. Furthermore, contrary to the Examiner's assertions, Newcomb does not disclose a golf ball formed by reaction injection molding. Newcomb merely states that the golf ball can be produced by many different methods, such as cast molding, injection molding or reaction injection molding, but Newcomb does not actually teach a golf ball formed by reaction injection molding. Additionally, Newcomb discloses thermoplastic polyurethane materials, not reaction injection molded polyurethane materials. The process and the golf ball of Newcomb are very different from Applicants' invention.

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Applicants respectfully submit that for a prior art reference to anticipate, each and every element of the claims must be literally present. Applicants respectfully submit that contrary to the Examiner's assertions, Newcomb does not teach each and every element of Applicants' claim 16.

For at least these reasons, Applicants respectfully submit that claim 16 is not anticipated by Newcomb. Therefore, Applicants respectfully request that the rejection of claim 16 under 35 U.S.C. 102(b) be reconsidered and withdrawn.

Claims 40, 42 and 48 were rejected under 35 U.S.C. 102(b) as being anticipated by Sullivan et al. (US 5,356,941). The Examiner stated that regarding claims 40 and 42, Sullivan discloses process for making a ball comprising a core and a cover, wherein the cover is made using RIM technique by injection of liquid urethane, and regarding claim 48, Sullivan discloses a golf ball comprising a urethane cover. The Examiner concludes that the recycled reactants are process/method steps and are not relevant to the final product.

Applicants respectfully submit that Sullivan et al. does not anticipate Applicants' claims 40, 42 and 48, and Applicants respectfully disagree with the Examiner's characterization of Sullivan. Contrary to the Examiner's assertions, Sullivan does not disclose a golf ball, or a golf ball comprising a urethane cover. Instead, Sullivan discloses a game ball that is a softball or baseball. Finally, Applicants respectfully submit that contrary to the assertions of the Examiner, the recycled reactants are relevant to the final product. Recycled reactants are raw materials that make up the final product, the golf ball.

Applicants respectfully submit that for a prior art reference to anticipate, each and every element of the claims must be literally present. Applicants respectfully submit that contrary to the Examiner's assertions, Sullivan does not teach each and every element of Applicants' claims 40, 42 and 48.

For at least these reasons, Applicants respectfully submit that claims 40, 42 and 48 are not anticipated by Sullivan. Therefore, Applicants respectfully request that the rejection of claims 40, 42 and 48 under 35 U.S.C. 102(b) be reconsidered and withdrawn.

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Claims 15 and 46 to 48 were rejected under 35 U.S.C. 102(e) as being anticipated by Cavallaro et al. (US 5,759,676). The Examiner stated that regarding claims 15 and 46, Cavallaro discloses a golf ball comprising a core and a cover, and the cover has a flex modulus greater than 80,000 psi and a thickness from 0.015 to 0.14 inch. The Examiner further stated that the reaction time is a process/method and is not relevant to the final product. Regarding claim 48, Cavallaro discloses a golf ball comprising a polyurethane cover. The Examiner concludes that the recycled reactants are process/method steps and are not relevant to the final product.

Applicants respectfully submit that Cavallaro et al. does not anticipate Applicants' claims 15 and 46 to 48, and Applicants respectfully disagree with the Examiner's characterization of Cavallaro. Contrary to the Examiner's assertions, Cavallaro does not disclose a golf ball comprising a reaction injection molded polyurethane cover, or a cover formed from reactants, as claimed by Applicants. Instead, Cavallaro discloses a golf ball comprising a thermoplastic polyurethane material. Finally, Applicants respectfully submit that contrary to the assertions of the Examiner, the recycled reactants are relevant to the final product. Recycled reactants are raw materials that make up the final product, the golf ball.

Applicants respectfully submit that for a prior art reference to anticipate, each and every element of the claims must be literally present. Applicants respectfully submit that contrary to the Examiner's assertions, Sullivan does not teach each and every element of Applicants' claims 15 and 46 to 48.

For at least these reasons, Applicants respectfully submit that claims 15 and 46 to 48 are not anticipated by Cavallaro. Therefore, Applicants respectfully request that the rejection of claims 15 and 46 to 48 under 35 U.S.C. 102(e) be reconsidered and withdrawn.

Claims 16 to 23, 31 to 33, 35 to 38 and 45 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (5,334,673) in view of Sullivan (5,356,941). The Examiner stated that Wu discloses polyurethane golf ball parts (core or cover), but Wu does not disclose reaction injection molding (RIM). The Examiner further stated that Sullivan teaches a game ball comprising a cover formed by reaction injection

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molding (RIM). The Examiner concluded that one of ordinary skill in the art would have modified Wu in view of Sullivan by using the RIM process to achieve the desired properties.

Applicants respectfully submit that the Examiner has failed to make out a *prima facie* case of obviousness. Wu discloses a golf ball with a specific type of polyurethane cover made from a polyurethane prepolymer and a slow-reacting polyamine curing agent and/or a difunctional glycol (Abstract and claims). Wu teaches that several curing steps are necessary to cure the cover (column 4, line 50 to column 6, line 68). As stated by the Examiner, Wu does not disclose a golf ball component formed by RIM.

As discussed above, Sullivan does not disclose a golf ball, or a golf ball comprising a urethane cover, but instead discloses a game ball that is a softball or baseball. Applicants respectfully submit that the Examiner has mischaracterized the Sullivan reference, and contrary to the Examiner's assertions, Sullivan does not disclose a golf ball with a cover formed by RIM.

Applicants respectfully submit that the Examiner has shown no motivation, suggestion or teaching for combining Sullivan with Wu to make a golf ball. At most, it might have been obvious to try to make a golf ball using a RIM process, but this is not the standard for obviousness. One skilled in the art would not be motivated to make the golf ball, or the cover, of Wu using RIM since the entire focus of Wu is on a particular slow curing, multiple step process for making a thermoset polyurethane cover for a golf ball, and there is no motivation to combine Wu with Sullivan since Sullivan is directed to game balls such as softballs or baseballs.

For at least these reasons, Applicants respectfully submit that claims 16 to 23, 31 to 33, 35 to 38 and 45 are not obvious under 35 U.S.C. § 103(a) over Wu in view of Sullivan. Applicants therefore respectfully request that the rejection of claims 16 to 23, 31 to 33, 35 to 38 and 45 under 35 U.S.C. § 103(a) as obvious over Wu in view of Sullivan be reconsidered and withdrawn.

Claim 34 was rejected under 35 U.S.C. 103(a) as being unpatentable over Wu in view of Sullivan as applied to claims 16 to 23, 31 to 33, 35 to 38 and 45, and further

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in view of Molitor (4,674,751). The Examiner stated that Wu in view of Sullivan does not disclose an ionomer blended with the polyurethane in the cover material, but Molitor teaches a cover made from a urethane and an ionomer. The Examiner concluded that one skilled in the art would have modified the cover by including an ionomer to improve the durability of the cover.

As previously discussed, Applicants respectfully submit that the Examiner has shown no motivation, suggestion or teaching for combining Sullivan with Wu. At most, it might have been obvious to try to make a golf ball using a RIM process, but obvious to try is not the correct standard for obviousness. One skilled in the art would not be motivated to make the golf ball of Wu using RIM. The addition of another secondary reference, Molitor, does not remedy this defect. Additionally, Molitor is directed to a cover composition comprising a thermoplastic urethane and an ionomer. Even if there was motivation to combine Wu and Sullivan, which Applicants submit there is not, the addition of Molitor for a cover formed from a urethane and an ionomer would only provide a thermoplastic urethane and ionomer blend cover.

For at least these reasons, Applicants respectfully submit that claim 34 is not obvious under 35 U.S.C. § 103(a) over Wu in view of Sullivan and further in view of Molitor. Applicants therefore respectfully request that the rejection of claim 34 under 35 U.S.C. § 103(a) as obvious over Wu in view of Sullivan and further in view of Molitor be reconsidered and withdrawn.

Claims 41 and 44 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wu in view of Sullivan as applied to claims 16 to 23, 31 to 33, 35 to 38 and 45, and further in view of Bayer - RIM Part and Mold design (polyurethanes). The Examiner stated that Bayer teaches the use of glycolysis, a new way to convert polyurethane materials back to their original raw materials, therefore one skilled in the art would have modified the invention of Wu in view of Newcomb by adding recycled material to decrease manufacturing costs.

First, Applicant assumes the Examiner means Sullivan, not Newcomb, in the rejection as Newcomb was not applied in this rejection. Assuming that the intended reference is Sullivan, Applicants respectfully submit that the Examiner has shown no

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motivation, suggestion or teaching for combining Sullivan with Wu. At most, it might have been obvious to try to make a golf ball using a RIM process, but obvious to try is not the correct standard for obviousness. One skilled in the art would not be motivated to make the golf ball of Wu using RIM since the entire focus of Wu is on a particular slow curing, multiple step process for making a thermoset polyurethane cover for a golf ball, and there is no motivation, teaching or suggestion to combine Wu with Sullivan, which is directed to game balls not golf balls. The addition of another secondary reference, Bayer - RIM Part and Mold design (polyurethanes), does not remedy this defect.

For at least these reasons, Applicants respectfully submit that claims 41 and 44 are not obvious under 35 U.S.C. § 103(a) over Wu in view of Sullivan and further in view of Bayer - RIM Part and Mold design (polyurethanes). Applicants therefore respectfully request that the rejection of claims 41 and 44 under 35 U.S.C. § 103(a) as obvious over Wu in view of Sullivan and further in view of Bayer - RIM Part and Mold design (polyurethanes) be reconsidered and withdrawn.

Claims 16, 20 and 24 to 30 were rejected under 35 U.S.C. 103(a) as being unpatentable over Cavallaro (5,759,676) in view of Sullivan (5,356,941). The Examiner stated that regarding claims 16 and 20, Cavallaro discloses a golf ball comprising a core and a polyurethane cover, but Cavallaro does not disclose reaction injection molding. The Examiner further stated that Sullivan teaches a game ball comprising a cover formed by reaction injection molding (RIM). The Examiner further stated that regarding claims 24, 25 and 28, Cavallaro discloses a cover with a flex modulus of at least 80,000 psi; regarding claims 26 and 27, the cover has a Shore D hardness of 70; regarding claim 29, since the cover is harder than the core material the flex modulus will also be higher; and regarding claim 30, the cover includes two layers. The Examiner concluded that one of ordinary skill in the art would have modified Cavallaro in view of Sullivan by using the RIM process to achieve the desired properties.

Applicants respectfully submit that the Examiner has failed to make out a *prima facie* case of obviousness. As previously discussed, Cavallaro discloses a golf ball

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comprising a thermoplastic polyurethane material. As stated by the Examiner, Cavallaro does not disclose a golf ball component formed by RIM.

As discussed above, Sullivan does not disclose a golf ball, or a golf ball comprising a urethane cover, but instead discloses a game ball that is a softball or baseball. Applicants respectfully submit that the Examiner has mischaracterized the Sullivan reference, and contrary to the Examiner's assertions, Sullivan does not disclose a golf ball with a cover formed by RIM.

Applicants respectfully submit that the Examiner has shown no motivation, suggestion or teaching for combining Sullivan with Cavallaro to make a golf ball. At most, it might have been obvious to try to make a golf ball using a RIM process, but this is not the standard for obviousness. One skilled in the art would not be motivated by Sullivan to make the golf ball, or the cover, of Cavallaro using RIM since there is no motivation to combine Cavallaro with Sullivan since Sullivan is directed to game balls such as softballs or baseballs.

For at least these reasons, Applicants respectfully submit that claims 16, 20 and 24 to 30 are not obvious under 35 U.S.C. § 103(a) over Cavallaro in view of Sullivan. Applicants therefore respectfully request that the rejection of claims 16, 20 and 24 to 30 under 35 U.S.C. § 103(a) as obvious over Cavallaro in view of Sullivan be reconsidered and withdrawn.

Claims 16 to 21, 23, 25, 29 to 36, 38 to 41, 43, 44 and 48 were provisionally rejected as claiming the same invention as that of claims 14 to 20, 22, 27 to 32, 34 to 41 and 44 of copending Application No. 09/040,798. The Examiner stated that this is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Applicants respectfully submit that since this is only a provisional rejection at this time, Applicants will address it at a later time, when one of the applications does in fact become patented.

Claims 1 to 15, 22, 24, 26 to 28, 37, 42 and 45 to 47 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 13, 21, 23 to 26, 33, 42 and 43 of copending

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Application No. 09/040,798. The Examiner stated that although the conflicting claims are not identical, they are not patentably distinct from each other because the present invention and the '798 application both claim the process of making a golf ball comprising making at least a core and a cover component by mixing two or more reactants. The Examiner further stated that the '798 application produces a product with a flex modulus from 5 to 310 kpsi in a reaction time of 5 minutes or less, and the present invention claims a product with a flex modulus from 1 to 310 kpsi in a reaction time of less than 2 minutes. The Examiner concluded that varying the reaction time of the product is an obvious modification of the '798 application that would promote the desired and/or optimal characteristics of the product.

Applicants respectfully submit that since this is only a provisional rejection at this time, Applicants will address it at a later time by filing a terminal disclaimer, when one of the applications does in fact become patented.

The Examiner is invited to telephone Applicant's attorney if it is deemed that a telephone conversation will hasten prosecution of the application.

CONCLUSION

Applicants respectfully request reconsideration and allowance of each of the presently rejected claims. Applicants respectfully request allowance of claims 1 to 48, the claims currently pending.

Respectfully submitted,

THOMAS J. KENNEDY, III ET AL.

Customer No. 24492
(413)322-2937

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By Michelle Bugbee
Michelle Bugbee, Reg. No. 42,370
Attorney for Applicants
The Top-Flite Golf Company
A wholly-owned subsidiary of Callaway Golf Company
425 Meadow Street, P. O. Box 901
Chicopee, MA 01021-0901

cc: Richard M. Klein, Esquire (SLD 2 0207-3-1)